Capability Gap Brief

MAGTF Information Operations

Major David W. Clapp
Fires & Maneuver Integration Division
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Top Ten Gap Listing

FMID IDENTIFIED GAP	Priority
Unmanned Aircraft Systems	1
Assault Support	2
Target Acquisition	3
Counterfire / Targeting	4
Fire Support Coordination	5
Information Operations	6
Personal Equipment	7
Small Arms / Crew-Served	8
Mobility / Counter-Mobility	9
Rockets / Artillery	10
Riverine / Special Operations	11
Public Affairs	12
Offensive Air Support	13
Electronic Warfare	14
Civil Affairs	15
Offensive Anti-Air Warfare	16

FNA Results: FMID

G – Gap, E – Excess, S – Shortfall, N - NA

Highest Pri JCA supported and total number	*FMID Section/ #* **MCTL tasks**	Description of Capability Gap by FMID section across applicable tasks	FMID Pri	G/ E/ S/ N	Gap Mitigation	
					POM-10	Beyond
Joint Deployment, Rapid Distribution / **15 JCA'a supported**	*Information Operations*/ **Supports 18 of 49 FMID FAA tasks**	**Capability gaps exist in full-spectrum, automated Information Operations (IO) planning and integration including capability gaps in all core elements, supporting elements, and related activities.**	6	G	**Y**	**Y**

Capability Analyzed
Information Operations

15 JCA's supported: Hi Pri Joint Deployment and Rapid Distribution

18 MCT's supported : Hi Pri Conduct SASO

Deficiencies in Conditions: Unable coordinate all IO functions.
Deficiencies in Standards: Unable to develop PSYOP. Unable to address CNO across the MAGTF AO. Unable to seamlessly manage imagery across the MAGTF.
Possible DOTMLPF Implications: Force Structure and Manpower requirements.

Inputs utilized for analysis:

- MAGTF FAA dtd Jun 2006
- UNS-03067UA PSYOP (Psychological Operations)
- UNS-04143UA Deployable Press Information Centers
- UNS-CDTS Portfolio # 99194FA Tactical Imagery Production System (TIPS)
- Marine Corps Midrange Threat Estimate: 2005-2015
- Current Funding Data: POM-08 and Supplemental
- Lessons Learned Database
- No IO Programs of Record

Gap, Excess, or Shortfall

D	**No PSYOP or CNO Doc /IO and EW Doc outdated**
O	**No standing IO structure (billets or MOS) / No USMC PSYOP capability / limited CNO**
T	**No formal IO schools**
M	**Multiple Core, Supporting, Related Elements**
L	**No IO career path / No formal IO schools**
P	**No IO MOS designation / TO line numbers**
F	**May require USMC IO Training Ranges**

Current PORS

Supporting Element PORs

- Audiovisual Production Equipment (AVPE) – Individual digital still imagery acquisition, production and management capability for CC.
- Public Affairs Equipment (PAE) – Individual still and video acquisition and production capability for use by Public Affairs correspondents.
- See EW Brief for add'l PORs

Description of Capability Gap

- **IO Support to MAGTF**
  - Minimal MEU/MEB/MEF IO capability
  - No USMC IO “proponent”
  - Minimal Joint reach-back
  - Minimal National asset reach-back

- **EW**
  - No USMC “proponent”
  - No real-time EW COP
  - AEW gap 2015-????
  - No comprehensive MAGTF EW capability defined

Description of Capability Gap

- **PSYOP**
  - No Tactical PSYOP production capability
  - No Tactical PSYOP delivery capability
  - No PSYOP reach-back
  - No USMC Doctrine
- **CNO**
  - No CNA development
  - No CNE development
  - No CNO planning
  - No CNO coordination
  - No USMC Doctrine
- **MILDEC & OPSEC**
  - By SOP, TTP, consideration during planning.
- ***CC and PA will be addressed separately***

Identifying the Gap

Top Level Guidance

- DoD Information Operations (IO) Roadmap, 30 Oct 2003:
  - Identifies IO as a Core Competency
  - Provides framework for understanding IO
  - Establishes policies and procedures to empower Combatant Commanders with authority to plan and integrate IO
  - Consolidates oversight, advocacy, and analytic support for IO
  - Calls for a dedicated work force and improved training and education for IO
  - Mandates innovative organizational structures that advance operational capabilities to keep pace with warfighter needs and support defense transformation

Information Operations Defined

"The integrated employment of the core capabilities of Electronic Warfare (EW), Computer Network Operations (CNO), Psychological Operations (PSYOP), Military Deception (MILDEC), and Operational Security (OPSEC), in concert with specified supporting and related capabilities, to influence, disrupt, corrupt or usurp adversarial human and automated decision making while protection our own."

- *DoD Information Operations Roadmap*
30 October 2003

- *Joint Definition, JP 3-13 Information Operations*
13 February 2006

Information Operations Support to MAGTF

- IO supports the MAGTF:

"…through actions that use information to deny, degrade, disrupt, destroy or influence an adversary commander's methods, means or ability to C2 his forces and to inform target audiences through informational activities."

- MCWP 3-40.4 MAGTF Information Operations

Impact on the MAGTF

- IO includes all actions taken to:
  - Affect enemy information and information systems
  - Defending friendly information and information systems

- Information:
  - As data, is a key component of combat, communications, and intelligence systems.
  - Analyzed to produce intelligence is a key component of command and decision making processes.
  - As media, influences perceptions, attitudes, and beliefs.

- ***Information and information systems are targets that, when affected, influence key decision makers and selected audiences. Information superiority provides a powerful advantage to the MAGTF.***

Impact on the MAGTF

- IO is conducted during all phases of an operation, across the range of military operations, and at every level of war.
  - USMC Focus at the Tactical level while leveraging Joint Capabilities at the Operational and Strategic levels.
  - *"At every echelon of command and all levels of warfare, the use of information is likely to be a critical tool in achieving the objectives of the commander."*

    – MCWP 3-40.4 MAGTF Information Operations

- IO will primarily support the MAGTF through:
  - Battlespace Shaping
  - Force Enhancement
  - Force Protection
  - Any other information-oriented activity the MAGTF can leverage in order to better facilitate the tailored application of combat power.

MAGTF Battlespace Shaping

- The use of power, information, and influence to achieve national objectives.
  - During peacetime, deployed MEUs:
    - Demonstrate national resolve through forward presence
    - Enhance regional stability through cooperative engagement with allies in exercise, exchange and informational programs.
  - During crises, MAGTF-shaping operations must be linked to US strategic objectives and be consistent with on-going regional engagement activities.
  - During conflict, MAGTF-shaping operations focus on setting those conditions necessary for operational and tactical success.
- ***IO, used in support of battlespace shaping, ensures the purpose of the MAGTF's mission is clear to both the local and the worldwide audience.***

MAGTF Force Enhancement

- The ability to obtain timely and accurate information is critical to C2, strategic agility, and operational maneuver.

- The force that best controls, utilizes, and safeguards information and information systems has always enjoyed a decided military advantage.

- As a force enhancer, IO integrates varied capabilities and activities into a coherent, seamless plan to achieve specific objectives by:
  - Influencing the adversary commander's estimate of the situation
  - Slowing the adversary's tempo of operations
  - Degrading the adversary commander's decision cycle
  - Disrupting the adversary commander's ability to generate and focus combat power

MAGTF Force Protection

- Sea-basing and DO will continue to increase the MAGTF's dependency on information and information systems.

- IO will enhance Force Protection by protecting and defending the information and information systems that the MAGTF depends on to conduct these operations, through:

  - Sustaining the MAGTF commander's freedom of action.
  - Reducing the adversary's ability to affect friendly C2.
  - Minimizing friendly C2 system vulnerabilities to adversary C2 attack through the employment of adequate physical, electronic, information, and OPSEC measures.
  - Minimizing friendly mutual interference on friendly C2 and unintended third parties throughout the electromagnetic spectrum.
  - Minimizing the effects of adversary perception management (IO) activities.

New or Current Capability Issues

- Gaps were identified through analyzing the application of existing and programmed capabilities to the defined requirements of Strategic Planning Guidance/DoD/Joint Directives.
  - Existing USMC capabilities:
    - EW
    - MILDEC
    - OPSEC
  - New USMC capabilities to be established:
    - Tactical PSYOP
    - CNO

- No duplicative gaps are being analyzed.

New or Current Capability Issues Across Services

	USAF	USA	USN
Lead	**AFIOC, Lackland AFB**	**USAIOP, Ft Leavenworth**	**NIOC, Norfolk, VA**
CNO			
PSYOP	- Produce & Deliver **- EC-130** Commando Solo	-**Develop, Produce, Deliver** -**USACAPOC**, Ft. Bragg	-Produce & Deliver - Coordinates with Army PSYOP through **NETWARCOM**, Norfolk
EW	**- Effective AES** **- No Exp AEW** **- Min Supt to JFLCC**	**- Expanding CREW** **- SIGINT** **- No Doctrine** **- No AEA**	**- Effective Air/Surf EW** **- Gap Exp AEW 2012**
OPSEC	TTPs	TTPs	TTPs
MILDEC	TTPs	TTPs	TTPs

ROBUST, **PARTIAL**, **GAP**

Integration Concerns

- **Review of prioritized capability gaps identified by other Integration Divisions which may overlap with F&MID gaps.**

Force Protection Integration Division
Prioritized Gap Listing 1-6

G – Gap, E – Excess, S – Shortfall, N - N

JCA Pri	JCA	MCTL	Description of Capability Gap by Task	G/E/ S/N	Gap Mitigation	
					POM-10	Beyond
1	Joint Battlespace Awareness	2.2.1	**Predict IED Emplacement**	S	X	
2	Joint Stability Operations	4.10.1.1, 4.10.1.4	**Identify Dominance**	S	X	
3	Joint Land Operations	1.4.1	**Detect IEDs**	S	X	
5	Joint Information Operations	2.2.1	**Electronic Warfare** and **Neutralization of IEDs**	S	X	

CNO, OPSEC, PSYOP, EW, MILDEC, M

Intelligence Integration Division
Prioritized Gap Listing 1-3

G – Gap, E – Excess, S – Shortfall, N - NA

Gap #	JCA	MCTL/*IID Section*	Description of Capability Gap by Task	G/E/ S/N	Gap Mitigation	
					POM-10	Beyond
1	4.5.2.0 Intelligence Architecture Development 7.0.0.0 Joint Protection 9.3.0.0 Conduct Decisive Maneuver 14.0.0.0 Joint Special Operations and Irregular Warfare 14.2.0.0 Direct Action 14.4.0.0 Unconventional Warfare	2.1 Plan and direct Intelligence Operations 2.1.1.5 **Support targeting**	Limited ability to rapidly disseminate actionable intelligence and relevant products, to include **sensor to shooter Near Real Time (NRT) data** to the lower tactical levels (BN and below).	S	X	
2	4.2.0.0 Observation and Collection (All Domains)	2.2 **Collect data and intelligence**	**Limited ability to establish and maintain a persistent, multi-sensor collection architecture to enable a covert,**	S	X	

Intelligence Integration Division
Prioritized Gap Listing 4-6

G – Gap, E – Excess, S – Shortfall, N - NA

Gap #	JCA	MCTL/*IID Section*	Description of Capability Gap by Task	G/E / S/N	Gap Mitigation	
					POM-10	Beyond
3	5.3.1.0 Access and Share Intelligence Information and Forecasts	2.1 Plan and direct intelligence operations 2.4 Produce Intelligence	**Limited ISR data visibility and accessibility and database synchronization between USMC units/ organizations, other Services, Theater elements, coalition partners and government/non-government organizations external to the DoD.**	S	X	
4	14.4.0.0 Unconventional Warfare	2.2 Collect data and intelligence	**Limited ability to collect on rapidly changing threat signals of interest – refer to the following Joint Worldwide Intelligence Communication System**	S	X	

CNO, OPSEC, PSYOP, EW, MILDEC, MULT

Intelligence Integration Division
Prioritized Gap Listing 7-10

Gap #	JCA	MCTL/*IID Section*	Description of Capability Gap by Task	G/ E/ S/ N	Gap Mitigation	
					POM-10	Beyond
7	4.4.4.0 Intelligence Preparation of the Environment 8.0.0.0 Joint Logistics	2.2 Collect data and intelligence	**Limited ability to collect in restricted (urban, subterranean), terrain through camouflage, and in all weather conditions.**	S	X	
8	14.0.0.0 Joint Special Operations and Irregular Warfare	2.2 Collect data and intelligence	**Inability to remotely collect inside buildings or through walls on convention/ non-conventional threat force personnel.**	G	X	
10	4.4.4.0 Intelligence Preparation of the Environment 5.3.0.0 Develop and Maintain Shared Situational Awareness 14.0.0.0 Joint Special Operations and Irregular Warfare	2.4 Produce Intelligence 2.4.2 Interpret information	**Limited foreign language capability.**	S	X	

CNO, OPSEC, PSYOP, EW, MILDEC, MUL

Command and Control Integration Division
Prioritized Gap Listing 6-8

Gap #	JCA	MCTL	Description of Capability Gap by Task	G/E/ S/N
7	Conduct Information Assurance		**Gap at all echelons in sharing information with other coalition countries and non-governmental organizations**	G
8	Networking		**"MARFOR Gap in ability to monitor, maintain and manage the network."**	G
9	5.5 Plan Collaboratively	**5.1 Acquire, Process, Communicate Information, and Maintain Status** 5.2 Prepare Plans and Orders 5.2.1 Conduct Rapid Response Planning Process (R2P2) 5.3.1.7 Establish Liaisons **5.3.2 Establish Means to Command and Control** 5.3.4 Conduct Fire Support Coordination 5.5.2 Participate in the Development of Joint/Service Doctrine and Tactics, Techniques, and Procedures (TTPs) 5.5.3 Conduct Joint Mission Planning Utilizing JOPES (Campaign/Deliberate/Crisis Action Planning) 5.5 Conduct Joint and Coalition Operations 5.5.1 Integrate and Operate with Joint/Combined	**"Battalion and below- Gap in transport layer"**	G

DOTMLPF Impacts

- **No single DOTMLPF solution will completely mitigate this gap. A solution will require a combination of approaches.**

Doctrine/OTLPFM Impacts

- **Doctrine: No PSYOP or CNO doctrine**
  - Published doctrine addressing the capability?
    - JP 3-13 Information Operations 16 Feb 2006
      - MCWP 3-40.4 MAGTF Information Operations 9 Jul 2003
    - JP 3-53 Doctrine for Joint Psychological Operations 5 Sept 2003
    - JP 3-51 Joint Doctrine for Electronic Warfare 7 April 2000
      - MCWP 3-40.5 Electronic Warfare 10 Sep 2002
  - Without USMC doctrine to formalize operating concepts the potential of new PSYOP and CNO capabilities will not be maximized. A foundation must be laid to build future MAGTF IO capabilities and ensure these capabilities are seamlessly integrated into USMC warfighting concepts.

D/Organization/TLPFM Impacts

- **Organization: No standing IO structure (billets or MOS) / No USMC PSYOP capability / limited CNO / No IO proponent**
  - Unless USMC fills existing billets and creates additional billets, IO experience and capability will not be organic to the MAGTF and will not fully develop.
  - Without organic PSYOP the MAGTF will be dependent upon limited Joint forces to provide support.
  - Without organic CNO the MAGTF will be dependent upon limited Joint forces to provide support.
  - Without an IO “proponent” USMC will rely upon Joint guidance, leadership, and capabilities to shape MAGTF IO efforts.

DO/Training/LPFM Impacts

- **Training: No formal USMC IO schools**
  - How could training be modified or provided to mitigate or eliminate the gap?
    - IO training must be included at all levels of PME (Recruit Training, OCS, TBS, IOC, SOI, EWS, CSC, etc.)
    - This pervasive training exposure will ensure IO becomes as ingrained as a fire support plan, C2 plan, or logistics support plan.
  - What training requirements are identified for the fielding of new equipment?
    - TBD – Minimal new equipment will be required
  - Who can provide the required training?
    - USMC can leveraging existing Joint training opportunities (schools, ranges, exercises) to minimize cost, manpower, facilities impact.

DOT/Leadership/PFM Impacts

- **Leadership and Education: No IO career path/No IO formal schools**
  - Can leadership decisions mitigate gap?
    - Partially:
      - Leadership at all levels must ensure that existing IO billets are filled and that IO is integrated into every planning evolution. Shortfalls must be identified at the unit level.
  - Can leadership experience/change meet or mitigate gap?
    - Partially:
      - Leadership will gain experience through exposure to IO and become educated through the inclusion of IO at all levels of PME.
  - Is organizational leadership is needed to support change?
    - Yes
      - See MCIOC discussion

DOTL/Personnel/FM Impacts

- **Personnel: No IO MOS designation; T/O billets throughout the FMF not properly filled**
  - Describe personnel changes which can be done to eliminate gap.
    - Imperative that MAGTF fill existing IO billets at all times
    - Additional personnel will be made available to the MAGTF for operational requirements. (see MCIOC)
  - Can MOS realignment mitigate the gap?
    - Partially:
      - Establishing a recognized IO career track and PMOS for *some* IO personnel will legitimize the organization and provide incentive for personnel to remain in the field.
      - Secondary MOSs will be assigned to all others who receive formal IO training/education in order to readily identify those Marines most capable of filling the IO billets

- **Facilities: May require IO training ranges**
  - Currently USMC able to leverage Joint facilities for training.
  - USMC may determine need for MAGTF IO training facilities as this capability matures.

DOTLPF/Materiel Impacts

- **Materiel: Materiel requirements in EW**
  - Are there current materiel solutions available to mitigate the capability gap?
    - Yes - IOT bridge the MAGTF expeditionary AEW gap USMC can maintain EA-6B until follow-on capabilities are fielded.
      - Procure additional 8 ICAP III (20 FAA)
      - Extend EA-6B until JSF/UAS capability is FOC (2020-2024)
      - Require NEXGEN Jammer to be multi-platform (EA-6B, EF/A-18G, JSF), open architecture, Plug & Play
  - Are there any current service/joint solutions available which meets the requested capability?
    - Yes - USN operates EA-6B and can employ EA-18G (FOC 2012) in expeditionary role.
    - Is MC participating in another service's program? No
    - Is the MC developing a solution that is independent of other services?
      - Yes - USMC solution may lead to MAGTF being sole provider of Expeditionary Tactical AEW (EA-6B)

DOTLPF/Materiel Impacts

- **Materiel: Materiel requirements in EW**
  - If recommended solution is a material solution describe DOTMLPF implications.

D	**None**
O	**Possible FRS solution after 2012**
T	**Possible FRS solution after 2012**
M	**Acquire 8 additional ICAP-III; $88M**
L	**None**
P	**Possible FRS personnel requirements after 2012**
F	**Possible FRS facility requirements after 2012**

DOTLPF/Materiel Impacts

- **Materiel: Materiel requirements for PSYOP**
  - Are there current materiel solutions available to mitigate the capability gap?
    - Yes – TST material requirements are TBD but will likely be adopted from joint material solutions.
  - Are there any current service/joint solutions available which meets the requested capability?
    - Yes – Army tactical PSYOP teams are trained and equipped to similarly to USMC envisioned TSTs
    - Is MC participating in another service's program? No
    - Is the MC developing a solution that is independent of other services? No
  - If new start describe recommended solutions.
    - Is technology available/unavailable?
      - Joint material solutions will be sufficient to equip USMC TSTs

DOTLPF/Materiel Impacts

- **Materiel: Materiel requirements in PSYOP**
  - If recommended solution is a material solution describe DOTMLPF implications.

D	**Requires USMC PSYOP doctrine**
O	**Stand-up MCIOC with TSTs; MAGTF PSYOP line #s**
T	**Joint PSYOP training available**
M	**TBD**
L	**Stand-up MCIOC**
P	**Tactical PSYOP MOS; MAGTF T/O line #s; MCIOC**
F	**MCIOC**

DOTLPF/Materiel Impacts

- **Materiel: Materiel requirements in CNO**
  - Are there current materiel solutions available to mitigate the capability gap?
    - Yes – Material solutions fielded/being developed by Joint Forces
  - Are there any current service/joint solutions available which meets the requested capability?
    - Yes – USAF, USA, USN all developing CNO capabilities which will support the Joint Force
    - Is MC participating in another service's program? No
    - Is the MC developing a solution that is independent of other services? No

DOTLPF/Materiel Impacts

- **Materiel: Materiel requirements in CNO:**
  - If recommended solution is a material solution describe DOTMLPF implications.

D	**Requires USMC CNO doctrine**
O	**Stand-up MCIOC with CNO expertise**
T	**Joint CNO training available**
M	**TBD**
L	**Stand-up MCIOC**
P	**No additional personnel required**
F	**MCIOC**

Possible Solutions
Non-Materiel/Materiel

USMC bridges Airborne Electronic Warfare (AEW) gap 2015 – 2020:

- Postpone sundown of EA-6B until JSF/NEXGEN JX is FOC
- Purchase 8 additional EA-6B ICAP III to fill USMC required FAA of 23 A/C
- Insure NEXGEN JX is Plug & Play (EA-6B, EA-18G, JSF)
- Continue to pursue AEW/UAS

Possible Solutions
Non-Materiel/Materiel

USMC unites existing EW communities into a unified MAGTF EW capability through doctrinal changes, operational concepts, education and common TTPs.

- Sign Concept for MAGTF EW 2020
- Eliminate cultural intra-community barriers through re-defining MAGTF EW
- Establish a USMC EW proponent (MCIOC)
- Develop MAGTF EW COP
- Re-evaluate the EWCC

Possible Solutions
Non-Materiel/Materiel

USMC establishes Marine Corps Information Operations Command (MCIOC) in order to formalize the USMC IO effort and support the MAGTF.

- MCIOC scheduled to stand-up in CY 2009 IAW 202K Marine Corps WG
- Est 101 Marines
- Co-located with JIOC & AFIOC, Lackland AFB

Possible Solutions
Non-Materiel/Materiel

USMC establishes MAGTF tactical PSYOP capability with reach-back and ability to leverage and coordinate with Joint PSYOP capabilities.

- Tactical PSYOP Teams (TST) maintained at the MCIOC and deployed in support of MAGTF as required.
- TSTs will maintain tactical production and delivery capability but will rely on Joint Capabilities and reach-back for message development.
- Material requirements for TSTs in TBD.

Possible Solutions
Non-Materiel/Materiel

USMC develops a MAGTF tactical CNO capability with reach-back and ability to leverage and coordinate with Joint CNO capabilities.

- Provide MAGTF with limited capability to conduct CNA, CNE.
- Provide MAGTF ability to conduct CND.
- Provide MAGTF reach-back to leverage Joint CNO planning and capabilities as required.

Recommendation

- USMC bridges AEW gap by postponing sundown of EA-6B until JSF/NEXGEN JX is FOC.
- USMC unites existing EW communities into a unified MAGTF EW capability through doctrinal changes, operational concepts, education and common TTPs.
- USMC establishes MCIOC in order to formalize the USMC IO effort and support the MAGTF.
- USMC establishes MAGTF tactical PSYOP capability with reach-back and ability to leverage and coordinate with Joint PSYOP capabilities.
- USMC develops a MAGTF tactical CNO capability with reach-back and ability to leverage and coordinate with Joint CNO capabilities.

Back-Up Slides

New or Current Capability Issues

Service	Capability	G/S	Initiatives
USAF	- EC-130 - RC-135 - F-16CJ - Self Protect	- No tactical EAEW (**G**) - Min EW Spt JFLCC (**S**)	- Mix Pods/UASs to provide CIADS & CC2
USA	-Expanding CREW Capability -SIGINT	- No tactical EAEW (**G**) - Min EW expertise (**S**) - No Doctrine (**G**)	- UAS/RW - Developments across DOTMLPF
USN	- EP-3E - EA-6B - Fleet Defense - Self protect - Escort AEW	- No tactical EAEW beyond 2012 (**G**)	- EA-18G: **Not planned to be expeditionary** - UASs

USAF IO Initiatives

Air Force Information Operations Center

The Air Force Information Operations Center, with headquarters at Lackland AFB, Texas, is engaged in a myriad of activities supporting its role as the Air Force's information warfare executive agent. It integrates information warfare tactics, training and technology for combatant commanders. The center is comprised of about 1,000 military and civilian members trained in the areas of operations, engineering, operations research, intelligence, radar technology and communications and computer applications. AFIOC activated Sept. 10, 1993 by combining the Air Force Electronic Warfare Center with elements of the Air Force Cryptologic Support Center's securities directorate and portions of Air Force Intelligence Command.

318th Information Operations Group

Mission Statement: *The premier IW Group, training and integrating advanced tactics, technologies, and tools arming America's warfighters with decisive IW combat power.*

23rd Information Operations Squadron: Establishes Air Force integrated information warfare (IW) tactics, techniques, and procedures (TTP). Develops specific TTP for IW weapon systems and in response to adversary technology and tactics developments. Performs IW target development and weaponeering analysis. Detachment at Info Ops Technology Center (IOTC) ensures synergy between AF and DoD/Intelligence community IO/IW efforts.

315th Information Operations Squadron: Provides AFIWC a permanent presence in the National Capital Region to foster AF IO advancement by ensuring a synergy between AF and DoD/Intelligence community IO efforts. Develops IO expertise by imbedding AF IO warriors in 14 different work centers in the National Security Agency, the Joint Military Intelligence College, and sister-service's IO centers.

39th Information Operations Squadron: Securing information dominance by arming America's warfighters with superior information operations training through integration of advanced tools and technology to fight and win tomorrow's battles.

318th Information Operations Group

346th Test Squadron: Air Combat Command's (ACC) principal information operations (IO) test unit. Tests, evaluates and assesses operational and emerging IO capabilities for operational forces, national agencies, the acquisition community and DoD customers. Provides USAF's only emissions security testing of critical command and control systems. Maintains ACC's operational ranges for IO test and training exercises. Integrates with the DoD test community

453rd Electronic Warfare Squadron: Develops, maintains, and deploys Electronic Warfare (EW) capabilities in direct support of campaign planning, operations, acquisition, and testing. Provides responsive, realistic training simulations and conducts EW capability and vulnerability analysis. Provides threat change analysis, threat databases, and manages the worldwide exercise for the Air Force Electronic Warfare Integrated Reprogramming program.

92nd Information Warfare Aggressor Squadron: Conducts adversary information warfare (IW) operations and vulnerability assessments by employing realistic threat capabilities and tactics. Air Force focal point for deception, counter-deception, and OPSEC planning/ execution/Red tactics, technology, and procedures (TTP) development; Center lead for operational perception management.

USAF IO Battlelab

AIR FORCE INFORMATION OPERATIONS BATTLELAB

Mission

The mission of the Air Force Information Operations Battlelab is to rapidly identify innovative and superior material or non-material ways to plan and employ information operations capabilities, to organize and train forces for information operations, and to influence IO doctrine and tactics in order to meet current and emerging missions.

Vision

We envision ourselves as the Air Force leader in information operations innovation - achieving information superiority in the information age.

EC-130 Commando Solo

- The EC-130 Commando Solo conducts psychological operations (PSYOP) and civil affairs broadcast missions in the standard AM, FM, HF, TV and military communications bands.

- Missions are flown at maximum altitudes possible to ensure optimum propagation patterns. The EC-130 flies during either day or night scenarios with equal success, and is air refuelable. A typical mission consists of a single-ship orbit which is offset from the desired target audience. The targets may be either military or civilian personnel.

- Secondary missions include command and control communications countermeasures (C3CM) and limited intelligence gathering. The three variants are EC-130 ABCCC, EC-130E Commando Solo, and the EC-130H Compass Call.

United States Army Information Operations Proponent (USAIOP)

- **Mission:**

  Serves as the Commanding General, Combined Arms Center, designated information operations (IO) and personnel proponent office. It is responsible for developing and documenting all IO requirements for Doctrine, Operations, Training, Manpower, Logistics, Personnel, and Facilities (DOTMLPF); managing the eight personnel lifecycles for officers in the IO Functional Area; coordinates and teaches, at Fort Leavenworth, the qualification course for Information Operations Officers; and supports electronic warfare proponent activities.

- Specific responsibilities and functions of the (USAIOP) include:
  - Developing and documenting requirements for IO doctrine.
  - Determining the organizational designs for IO structure.
  - Identifies gaps in IO capabilities and develops DOTMLPF solutions in accordance with the Future Center at the US Army Training and Doctrine Command.
  - Coordinating and advising other proponents, schools, centers, Headquarters TRADOC, Headquarters Department of Army (HQDA) and other services concerning Information operations personnel capabilities, force design, structure, and manning.
  - Coordinating DOTMLPF requirements for electronic warfare (EW)
  - Responsible for the eight personnel lifecycle management functions for IO Officers, in accordance with applicable Army Regulations.
  - Establishing, maintaining and recommending changes to IO Officer accession criteria and standards for the HQDA Personnel Office.
  - Coordinating and teaching IO courses for the Army.

1st IO Command (LAND)

- The 1st Information Operations Command (Land) (1st IO Cmd), formerly known as the Land Information Warfare Activity (LIWA), provides support to land component and Army commands to facilitate planning and execution of Information Operations - also known as IO. Additionally, the 1st IO Cmd enhances worldwide force protection by carrying out a proactive defense of Army information and information systems. According to Defense Department, Joint Staff and Army doctrines, Information Operations are actions taken to affect adversary and other information and information systems while defending one's own information and information systems. Information Operations are both offensive and defensive in nature. The elements of IO include: Operations Security, Military Deception, Psychological Operations, Electronic Warfare, Physical Destruction, Computer Network Attack, Computer Network Defense, Information Assurance, Physical Security, Counter-Deception, Counter-Propaganda, Counterintelligence, Public Affairs, and Civil Affairs. When used by commanders, Information Operations is a force multiplier, providing increased security for America's soldiers and its allies. The 1st IO Cmd, as the chief agent for integrating IO into Army operations, provides IO-focused, multi-disciplined technical expertise to commanders' staffs. Additionally, 1st IO Cmd specialists can expedite responsive technical interfaces with other commands, Service components and National, Defense Department and joint information centers to ensure mission-tailored, thoroughly developed, IO plans covering the full spectrum of Information Operations. A totally unique organization within the Army, the 1st IO Cmd provides an unrivaled knowledge base on the many facets of IO and its deployment to the real-world theater of operations.

Organize, train, equip, and validate Civil Affairs and Psychological Operations soldiers and units for worldwide suppo Combatant Commanders.

United States Army
Civil Affairs and Psychological Operations Command
(Airborne) Vision

Seamlessly integrated Active Army and Army Reserve Civil Affairs and Psychological Operations soldiers and units who are capable, organized, trained to standard, equipped and validated; highly motivated and well led; ready, relevant, responsive, and reliable across the full spectrum of military operations in peace and war; living personal and professional standards of excellence towards which all others aspire.

HERBERT L. ALTSHULER
Major
General, United States Army
Commanding

4th Psychological Operations Group (Airborne) - 4th POG

"The Research and Analysis Division of the 4th POG(A), is the only source of finished PSYOP analytical intelligence products that are tailored to the needs of the entire PSYOP community, the geographic combatant commanders, and the intelligence community."

- JP 3-53 Doctrine for Joint Psychological Operations

Navy Information Operations Command (NIOC)

- **Our Mission:**
  As the Navy's Center of Excellence for Information Operations (IO), Navy Information Operations Command Norfolk advances Information Operations war fighting capabilities for Naval and Joint Forces by: providing operationally focused training and planning support; developing doctrine, tactics, techniques, and procedures; advocating requirements in support of future effects-based warfare; and managing functional data for Information Operations.

- **Our Vision:**
  The Navy Information Operations Command Norfolk, as the Navy's Center of Excellence for Information Operations, will provide unsurpassed Information Operations support to Naval Combatant and Joint Force Commanders and lead the transformation of Information Operations in defense of our nation.

US Navy PSYOP Capability

- **The Navy provides support to Joint PSYOP programs by providing assets (such as broadcast platforms using shortwave and very high frequency (VHF) frequencies) for the production and dissemination of PSYOP materials.** With the ability of naval vessels (especially the larger task forces) to produce audio-visual materials the Navy can often produce PSYOP products for use in denied areas. Leaflets are dropped utilizing the PDU-5B dispenser unit (aka Leaflet Bomb). The Navy coordinates extensively with the Army as the majority of PSYOP assets reside within USASOC. PSYOP planning and execution is coordinated through the Naval Network Warfare Command (NETWARCOM) and the Naval Information Operations Command (NIOC), both located in Norfolk, VA.
- The US Navy **possesses the capability to produce audiovisual products** in the Fleet Audiovisual Command, Pacific; the Fleet Imagery Command, Atlantic; the Fleet Combat Camera Groups; Naval Imaging Command; various film libraries; and limited capability from ships and aircraft of the fleet. A Naval Reserve PSYOP audiovisual unit supports the Atlantic Fleet. Navy personnel assets have the capability to **produce documents, posters, articles, and other material suitable for PSYOP**. Administrative capabilities exist ashore and afloat that prepare and produce various quantities of printed materials. Language capabilities exist in naval intelligence and among naval personnel for most European and Asian languages. The Fleet Tactical Readiness Group provides equipment and technical maintenance support to conduct civil radio broadcasts and broadcast jamming in the amplitude modulation frequency band. This unit is not trained to produce PSYOP products and must be augmented with PSYOP personnel or linguists when necessary. The unit is capable of being fully operational within 48 hours of receipt of tasking. The unit's equipment consists of a 10.6kw AM band broadcast radio transmitter; a broadcast studio van; antenna tuner; two antennas (a pneumatically raised 100 foot top-loaded antenna mast and a 500 foot wire helium balloon antenna); and a 30 kw generator that provides power to the system.

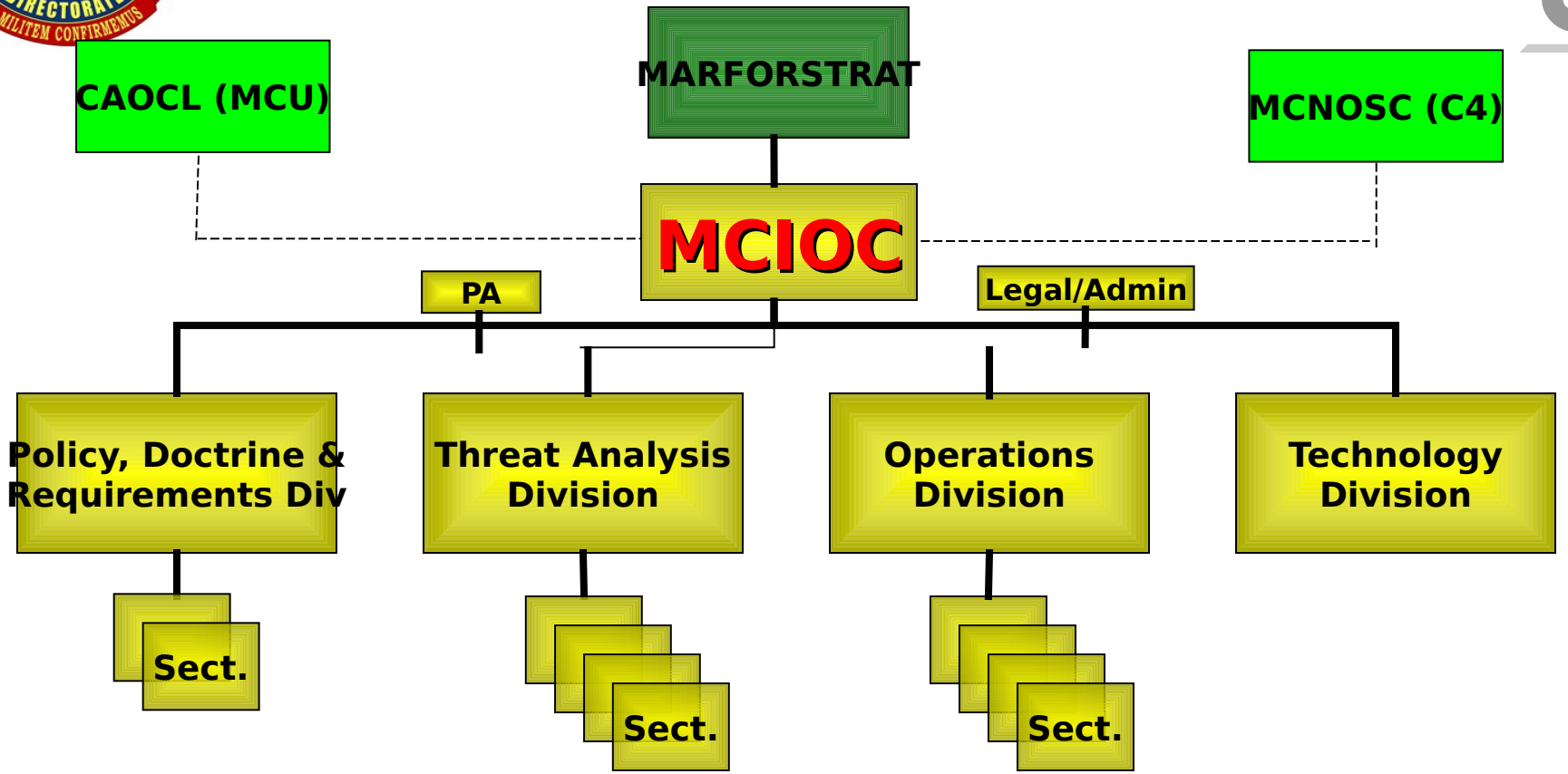
FNA Gap Identification

- The Functional Needs Analysis (FNA) is the second step in the Joint Capabilities Integration and Development (JCIDS) process, building on the Functional Area Analysis (FAA)
- The FNA assessed the ability of current and programmed joint warfighting capabilities under the full range of operational conditions and standards identified in the FAA
- The output from the FNA was a list of prioritized capability gaps, shortfalls, and excesses that require materiel and non-materiel solutions
- These capability gaps were the primary source for input into the Functional Solution Analysis (FSA)

Identify Capability Gaps, Shortfalls, and Excesses

- This effort assessed the ability of current and programmed joint warfighting capabilities against the range of operational conditions and standards identified in the FAA
- The FAA identified 30 JCA's and 49 MCTL tasks applicable to Fires and Maneuver division.
- FMID is comprised of 19 individual capability areas. These tasks conditions and standards were assessed across the 19 capability areas that comprise FMID, resulting in 293 instances where deficiency was noted.
- Performance deficiencies are characterized as follows: Where current or programmed capabilities are unable to achieve a threshold level of performance a "Gap" is assessed. Where the capability achieves the threshold but falls short of objective performance a "shortfall" is assessed. Gaps and shortfalls are further characterized in terms of "capability" and "capacity."
  - A "Capability" deficiency means we are unable to perform even a single instance of a task.
  - A "Capacity" deficiency means the Marine Corps can perform the task, but does not possess sufficient resources to conduct the number of tasks required at the service level.
- The FMID process resulted in a list of prioritized shortfalls and gaps. No excess capabilities were identified.

MCIOC Organizational Structure



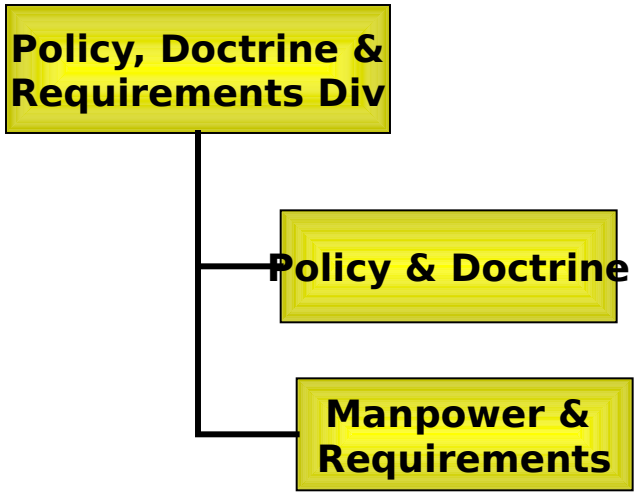
HQ Personnel

Rank	Quantity	MOS	Billet Description
Col	1	8041 / 0510	Commanding Officer
LtCol	1	8006 / 0510	Deputy Commander
Capt	1	4302	Public Affairs Officer
SgtMaj	1	8999	Sergeant Major
GySgt	1	0193	Admin Chief
Cpl	1	0151	Admin Clerk/Driver

MCIOC Total Personnel 48 Officers, 53 Enlisted

HQ Element Total = 3 Officers, 3 Enlisted

Policy, Doctrine, Acquisitions and Requirements Division



Objectives

Policy & Doctrine:

- **Monitors and reviews Marine Corps policy, doctrine, programs, missions and concepts of employment.**
- **Establish guidelines for the integration of IO into combined arms and maneuver warfare strategies of the Marine Air Ground Task Forces (MAGTF).**
- **Prepare requisite documentation (doctrine, policy, ROE and approval process) and TTPs**

Acquisitions & Requirements:

- **Deliver the the technical information necessary to define MAGTF Information Operations requirements to ensure:**
  - **Budget, programming and resource realities**
  - **DPG and DON PG**
  - **Unified CMDRs IPL**

Manpower:

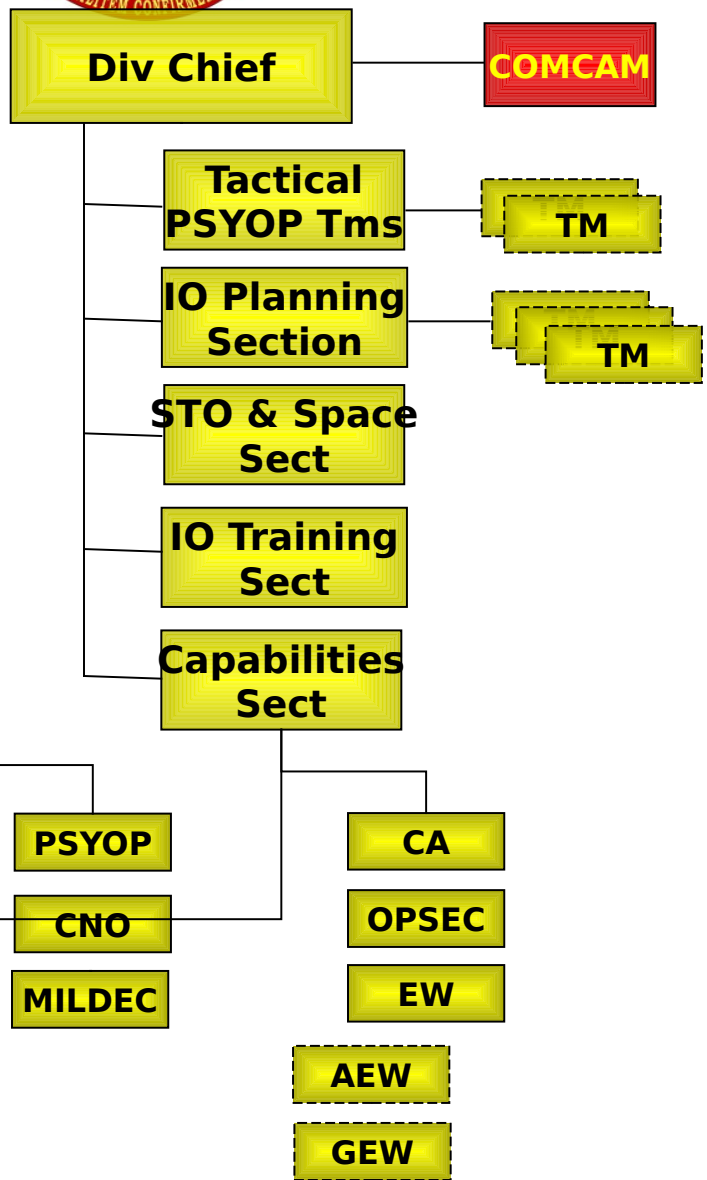
- **Will perform actions necessary to support MAGTF IO forces and missions**
- **Act as the MOS specialist for 0510,**

PDAR Div Personnel

Rank	Quantity	MOS	Billet Description
Maj	1	8834	Policy and Doctrine Section Head
Maj	1	8834	Manpower and Requirements Officer
Sgt	1	0193	Policty and Doctrine Specialist

PDAR Total = 2 Officers, 1 Enlisted

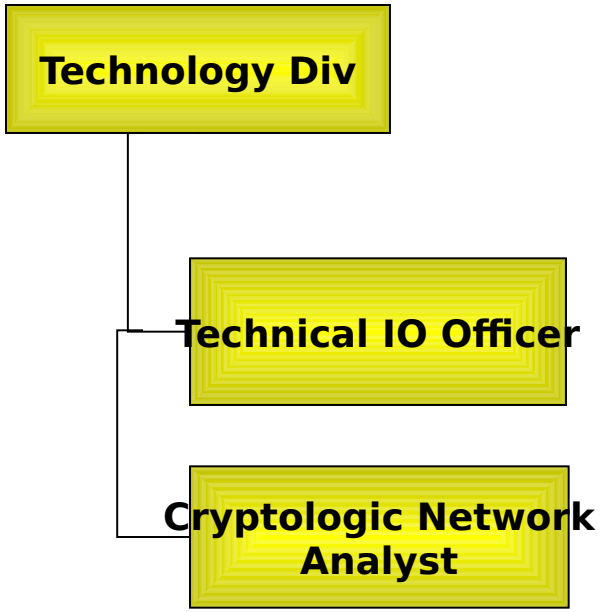
Operations Division



Rank	Quanity	MOS	Billet Description
LtCol	1	0202/0510	Operations Branch Head
1Lt	1	0206	Ground Electronic Warfare Officer
Capt	1	7588	Airborne Electronic Warfare Officer
Maj	1	0520	Psychological Operations Officer
Cpl	1	0521	Psychological Operations Specialist
Capt	1	0550	Military Deception Officer
1Lt	1	0550	Operations Security Officer
Capt	1	8834	Computer Network Operations Officer
Sgt	1	2611	Computer Network Operations NCO
Capt	1	0530	Civil Affairs Officer
SSgt	1	0531	Civil Affairs SNCO
CWO2	1	4602	Combat Camera Officer
GySgt	1	4691	Combat Camera Chief
Maj	1	0550	Training Officer
Cpl	1	0151	Training Section NCO
Maj	1	0510	IO Team Chief
Capt	4	0510	MAGTF IO Planning Team OIC
1Lt	4	0550	MAGTF IO Planning Team Asst. OIC
SSGt	4	0551	MAGTF IO Plannning Team SNCO
Sgt	4	0551	MAGTF IO Planning Team NCO
Cpl	4	0551	MAGTF IO Planning Team Specialist
Capt	2	0520	Tactical PSYOP Team OIC
1Lt	2	0525	Tactical PSYOP Team Asst. OIC
SSgt	2	0521	Tactical PSYOP Team SNCO
Sgt	2	0521	Tactical PSYOP Team NCO
Cpl	30	0521	Tactical PSYOP Team Specialist
Maj	1	8016	Special Technical Operations Officer
Sgt	1	8016	Special Technical Operations NCO
Capt	1	8666	Space Systems and Integration Officer
Capt	1	0202	Intel Support to IO Officer
Cpl	1	0231	Intel Support to IO Specialist

Ops Div Total = 39 Officers, 40

Technology Division



Technology Div Personnel Structure

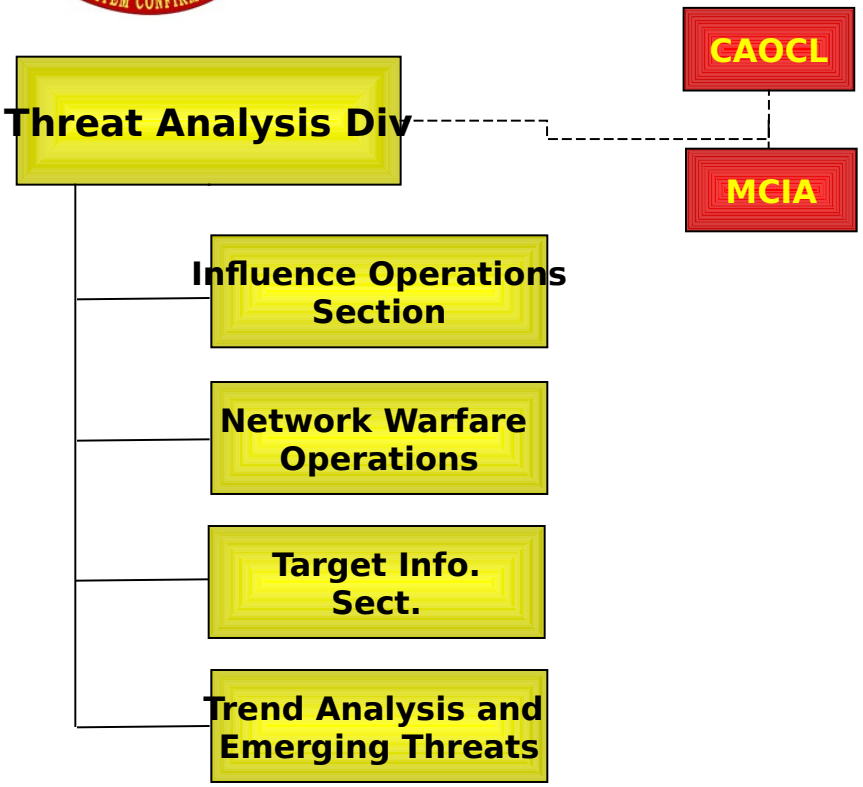
Rank	Quanity	MOS	Billet Description
Maj	1	8834	Technical IO Officer
Sgt	1	2611	Cryptologic Network Analyst

Tech Div Total = 1 Officer, 1 Enlisted

Objectives

- **The IO Innovation & Experimentation will manage the actions necessary to advance IO experimentation in support of the requirements / architecture / acquisition process.**
- **Responsible for providing IO specific enhancements to currently available tools and platforms IOT successfully plan, coordinate, and employ IO capabilities**
- **Develop supporting Experimentation Roadmaps**
- **Identify and facilitate development, and validate CONOPs and doctrine associated with IO I&E**
- **Feedback knowledge gained to support Acquisition, Rapid Fielding, Future Experimentation Requirements and Development of Requirements and Architecture**

IO Threat Analysis Division



Rank	Quanity	MOS	Billet Description
LtCol	1	0202/0520	Threat Analysis Branch Head
GySgt	1	0231/0521	Threat Analysis Branch Chief
Maj	1	0202/0520	Influence Operations Officer
Sgt	1	0211/0521	Influence Operations NCO
Cpl	1	0211/0521	Influence Operations Specialist
Maj	1	0202/8834	IO Targeting Officer
Capt	1	0202/8834	Network Warfare Officer
Capt	1	0202	Emerging Threats & Trend Analys

Objectives

The IOTAD provides full spectrum fused information operations threat event intelligence reporting, products, targeting and other support for the warfighter. Analyzes adversary capabilities, vulnerabilities, measures of effectiveness, IO target information and develops applications to expedite the delivery of integrated intelligence support to IO.

- **Provide threat information regarding the technical capabilities along with the behavioral, psychological and cultural aspects of individuals, organizations, and societies that are likely to conduct IO against MC forces and subsequently be targeted by MC forces**
- **Establish higher priority for information operations threat intelligence requirements, employ data mining technologies, database architectures, and networks for improving collection, analysis and dissemination and provide target fidelity to prepare effective IO strategies and plans.**

Total = 5 Officers, 5 Enlisted